

Title (en)

ROTARY VALVE AND ADSORPTION SEPARATION DEVICE

Title (de)

DREHSCHIEBER UND ADSORPTIONSTRENNVORRICHTUNG

Title (fr)

VANNE D'ALIMENTATION ROTATIVE ET DISPOSITIF DE SEPARATION D'ADSORPTION

Publication

EP 2014962 A4 20110525 (EN)

Application

EP 07742872 A 20070426

Priority

- JP 2007059437 W 20070426
- JP 2006128180 A 20060502

Abstract (en)

[origin: EP2014962A1] A rotary valve comprising sliding members for supplying treatment gas containing water vapor to a plurality of treatment processes is provided. The rotary valve comprises sliding members (1, 2; 4, 6), through which open flow passages (8, 9, 10), having sliding surfaces slidable to each other and a mechanical seal mechanism for switching the flow passages (8, 9, 10) while sealing fluid by preliminarily pressing the sliding surfaces, wherein the sliding surface of each sliding members (1, 2; 4, 6) is made of hydrophobic material (2, 4) different in hardness from the other.

IPC 8 full level

F16K 11/074 (2006.01); **A61M 16/10** (2006.01); **B01D 53/04** (2006.01); **F16K 3/08** (2006.01)

CPC (source: EP KR US)

A61M 16/10 (2013.01 - EP KR US); **A61M 16/101** (2014.02 - EP US); **A61M 16/20** (2013.01 - EP US); **B01D 53/04** (2013.01 - KR); **B01D 53/0446** (2013.01 - EP US); **F16K 3/08** (2013.01 - EP KR US); **F16K 11/074** (2013.01 - KR); **F16K 11/0743** (2013.01 - EP US); **A61M 2202/0208** (2013.01 - EP US); **B01D 53/047** (2013.01 - EP US); **B01D 2256/12** (2013.01 - EP US); **B01D 2259/40005** (2013.01 - EP US); **B01D 2259/4533** (2013.01 - EP US)

Citation (search report)

- [XYI] JP 2001349630 A 20011221 - SUMITOMO HEAVY INDUSTRIES, et al
- [Y] JP 2003144548 A 20030520 - TEIJIN LTD
- [A] WO 9725128 A1 19970717 - IONICS [US]
- [A] JP H0560254 A 19930309 - RANCO JAPAN LTD, et al
- See references of WO 2007129679A1

Cited by

DE102015225035A1; US10119426B2; WO2019052928A1

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

EP 2014962 A1 20090114; EP 2014962 A4 20110525; EP 2014962 B1 20180321; AU 2007246396 A1 20071115; AU 2007246396 B2 20130620; CA 2649532 A1 20071115; CA 2649532 C 20130521; CN 101432557 A 20090513; CN 101432557 B 20131023; ES 2667719 T3 20180514; HK 1128513 A1 20091030; JP 4975022 B2 20120711; JP WO2007129679 A1 20090917; KR 101364863 B1 20140219; KR 20090012319 A 20090203; MY 149202 A 20130731; TW 200803937 A 20080116; TW I409088 B 20130921; US 2009071341 A1 20090319; US 8016264 B2 20110913; WO 2007129679 A1 20071115

DOCDB simple family (application)

EP 07742872 A 20070426; AU 2007246396 A 20070426; CA 2649532 A 20070426; CN 200780015717 A 20070426; ES 07742872 T 20070426; HK 09106148 A 20090708; JP 2007059437 W 20070426; JP 2008514487 A 20070426; KR 20087026773 A 20070426; MY PI20084223 A 20070426; TW 96115337 A 20070430; US 22634907 A 20070426